## Helical compression spring

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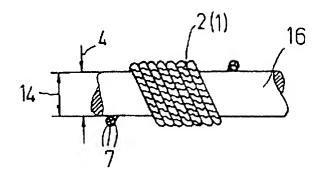
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## Abstract of DE3900473

In order to be able to use a helical compression spring (1, 2) as a locking spring, as an individual wire spring or a multiple wire spring in machine guns, it is proposed by the invention to select a spring material variant for matching which is as good as possible between a mandrel (16) or a case (17) as the guide element and the helical compression spring (1, 2). If a normal spring material is used, a major increase in the service life can be achieved by coating the wires (3, 7, 8, 9) with an age-hardening (precipitationhardening) spring material on a cobalt-nickelchromium base with titanium and aluminium additives, or a titanium nitride coating by means of sputtering. If the base material which is used for the wires (3, 7, 8, 9) of the helical compression spring (1, 2) is made of an agehardening spring material on a cobalt-nickelchromium base with titanium and aluminium additives, the coating of the wires may optionally be omitted. In addition to good mechanical properties, the helical compression spring (1, 2) has good insensitivity to stress cracking, in consequence good vibration damping and a considerably improved life.



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